We claim:

5

15

20

25

30

1. A method for making a beverage comprising:

providing a beverage;

providing an amount of glucosamine (GLCN);

mixing the beverage and the GLCN, thereby forming a GLCN beverage; and

heat-pasteurizing the GLCN beverage at a high temperature for a time sufficient to reduce colony forming units (cfu) by at least about 50%.

- 2. The method of claim 1, wherein heat-pasteurizing the GLCN beverage comprises heating the GLCN beverage to at least about 160°F.
 - 3. The method of claim 1, wherein heat-pasteurizing the GLCN beverage comprises heating the GLCN beverage to at least about 200°F.

4. The method of claim 1, wherein heat-pasteurizing the GLCN beverage comprises heating the GLCN beverage to a temperature in a range of from about 160°F to about 300°F.

- 5. The method of claim 1, wherein the GLCN beverage is heat-pasteurized for a time period from about 1 second to about 5 minutes.
 - 6. The method of claim 1, wherein the amount of GLCN added to the beverage is at least about 0.1 g GLCN per serving
 - 7. The method of claim 6, wherein the amount of GLCN added to the beverage is at least about 0.25 g GLCN per serving.
 - 8. A method for making a beverage comprising:

 providing a beverage;

 providing a first amount of GLCN;

5

10

15

mixing the beverage and the GLCN, thereby forming a GLCN beverage; and

heat-pasteurizing the GLCN-beverage, wherein the amount of GLCN in the GLCN beverage prior to heat-pasteurizing is substantially similar to a second amount of GLCN in the GLCN beverage after heat-pasteurizing.

- 9. The method of claim 8, wherein the second amount of GLCN in the GLCN beverage after heat-pasteurizing is at least about 80% of the first amount of GLCN in the GLCN beverage prior to heat-pasteurizing.
- 10. The method of any of claims 1 to 9, wherein the GLCN is derived from a fungal biomass containing chitin.
 - 11. A beverage made by the method of any of claims 1 to 11.

12. A beverage comprising:

at least about 0.01 g per serving of GLCN; and at least about 0.0001 wt. % levulinic acid.

20 13. A beverage comprising:

at least about 0.01 g per serving of GLCN; and at least about 0.0001 wt. % melanoidins.

- 14. The beverage of claim 13, wherein the beverage does not contain shellfish proteins.
 - 15. A beverage comprising:

at least about 0.01 g per serving of GLCN;

at least about 0.0001 wt. % levulinic acid and/or at least about

30 0.0001 wt. % melanoidins; and

wherein the beverage is at least about 160°F.

WO 2004/041198 PCT/US2003/034844

- 25 -

16. The beverage of any of claims 13 to 15, wherein the beverage comprises at least about 0.25 g GLCN per serving.